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ABSTRACT

An overview of the philosophy and methodology of experiential education in higher education is presented, with attention to definitions, characteristics, models, processes, and purposes of this approach. Experiential education involves a guided process of questioning, investigating, reflecting, and conceptualizing based on direct experience. The learner is actively engaged in the process of learning, has freedom to choose, and directly experiences the consequences. The following models and processes of experiential education are considered: Dewey's three-stage process of learning, Kolb's cyclical learning process, Joplin's action-reflection cycle, Williamson's format for designing an experiential curriculum in school settings, and Kesselheim's learning process. A number of practical experiential education programs and activities are described, including cooperative education, internships, and cross-cultural field study. Other types of programming include: the University without Walls concept and experiential techniques incorporated into a course or program, such as simulations and case studies. Wilderness/outdoor experiential programs are another alternative. Recommendations for faculty and colleges are included. (SW)

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THE APPLICATION AND INTEGRATION OF EXPERIENTIAL EDUCATION IN HIGHER EDUCATION

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December, 1986

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IN HIGHER EDUCATION

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The Application and Integration of Experiential Education in Higher Education

Introduction

The study of experiential education is a broad and complex undertaking, for the "field" encompasses a variety of theory, programs, activities, settings, individuals, and organizations. Thus, this paper will seek to provide a brief survey and overview of some of the content and practices of experiential education. It is by no means a complete review of literature sources and applied programming options. Rather, the intent is to capture the "spirit" and "energy" that experiential education can and does contribute to American higher education.

The paper is divided into three parts. Part I briefly reviews the foundations of experiential education, noting several definitions, highlighting some characteristics, models, processes, and purposes of this philosophical approach to teaching and learning. Part II looks at a number of practical programs and activities based on the foundational principles of Part I. Part III, in conclusion, presents a brief review of recommendations to faculty and institutions seeking to complement experiential education into their environments.

It is the author's hope that this paper will inspire the readers towards further, serious exploration of possible ways of integrating experiential education into courses, curriculum, programs, institutions, and personal lifestyle, in addition to providing relevant research for a possible future doctoral dissertation by the author.

PART I--FOUNDATIONS OF EXPERIENTIAL EDUCATION

1. Definitions of Experiential Education

In many ways, people have always been learning from their experiences--"learning by doing." The Greek philosopher, Socrates, employing what was to become known as the "Socratic Method," emphasized and modeled the use of questions and discussion as a learning tool. For experiential educators, it is important to note that Socrates believed that "students had something to contribute to the learning . . . and that the process of becoming educated was the important thing, rather than arriving at a final static state . . ." (Crosby, p.10)

Modern advocates of experiential education include, among others, William James and John Dewey. James, in his Talks to Teachers and Students (1900), stressed the necessity for holistic education, active involvement, sensory experience, student interest, and interdisciplinary learning activities (Donaldson, pp.7-8). John Dewey, known as the father of the Progressive Education movement, outlined his views in Experience and Education (1938), by pointing out that learning does not begin with some metaphysical abstraction, but with experience of the real world. His principles of "Continuity" and "Interaction" (Dewey, pp.33-50) form the foundation for modern practices of experiential education.

A number of definitions of experiential education have been offered, ranging from specific to broad. Kendall and Duley suggest that:

> "Experiential Education" refers to learning activities that engage the learner directly in the phenomena being studied. The learning can be in all types of work or service settings . . . as a pedagogy that may be manifested in many different forms--internships, field experiences, cooperative education, practica, cross-cultural, and international learning, community, and public service, and other forms of carefully monitored, experience-based learning. (Kendall, Duley, et al, p.1)

Sexton and Ungerer suggest experiential education as:

learning activities outside the normal classroom environment, the objectives

> of which are planned and articulated prior to undertaking the experience, involving activity that is meaningful and real and on the some level as that of other nonstudents in the some nonclassroom environment, and in which the learner has the assistance of another person (most often a faculty advisor) in expanding the learning as much as possible that takes place in the nonclassroom settings. The terms internships, field-experiences, practicum, cross-cultural experience, service learning, cooperative education, or "sponsored work" experience are often used to identify these activities. (Sexton and Ungerer, P.1)

Hamilton views experiential learning as:

> . . . educational programs functioning outside of conventional school classrooms that place participants in responsible roles and engage them in cooperative, goal-directed activities with other youth, with adults, or both. (Hamilton, p.180)

These definitions strongly suggest experiential learning in nonclassroom settings. However, and as this paper will explore, experiential education can occur both in and outside of traditional environments. As Carl Rogers writes, experiential learning is more of an attitude and a process, rather than a limited location. Rogers defines experiential learning as having the qualities of "personal involvement . . . self initiation . . . pervasiveness . . . evaluation by the learner . . . and an essence of meaning." (Rogers, p.5)

2. Characteristics of Experiential Education

Experiential education should not be considered a haphazard happening, as some of the alternative education (i.e., open classroom) proponents of the 1960's and 1970's have suggested. While learners should certainly be open to "ah-ha" experiences, experiential learning and teaching should combine the elements of active involvement on the part of the learner towards relevant and real objectives, which are planned and guided by a teacher. The important feature of experiential education is that it is learner-centered, and not teacher or curriculum-centered, as in traditional schooling.

David Kolb, a leading contemporary advocate and researcher in experiential

learning, presents six characteristics of experiential education:

1. learning is best conceived as a process, not in terms of outcomes,
2. learning is a continuous process grounded in experience,
3. the process of learning requires the resolution of conflicts between dialectically opposed modes of adaption to the world,
4. learning is a holistic process of adaptation to the world,
5. learning involves transactions between the person and the environment, and
6. learning is the process of creating knolwedge. (Kolb, pp.25-38)

Laura Joplin, in her attempt to define experiential education, presents eight characteristics worthy of consideration. She views experiential learning as:

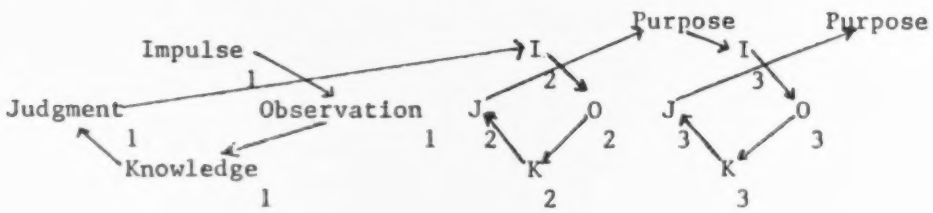
1. student-based rather than teacher-based;
2. personal, not impersonal, nature;
3. process and product orientation;
4. evaluation for internal and external reasons;
5. holistic understanding and component analysis;
6. organized around experience;
7. perception-based rather than theory-based;
8. individual-based rather than group-based. (Joplin, pp.19-20)

3. Models and Processes of Experiential Education

In order to understand and apply these principles and characteristics of experiential education to real settings, a number of "models" have been designed. Dewey posited a three-stage process of learning. Beginning with an "impulse"--a desire for something, a question, or a problem, learning then proceeds to

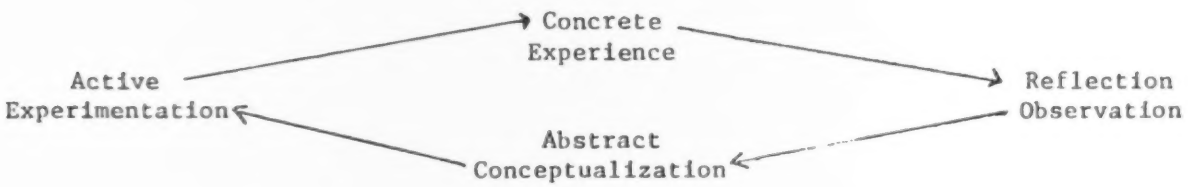
(1) "observation of surrounding conditions," (2) "knowledge of what has happened in similar situations in the past . . .," and (3) "judgment, which puts together what is observed and what is recalled to see what they signify." (Dewey, p.69)

Figure 1. Dewey's Model of Experiential Learning



For Kolb, experiential learning is complete learning, having four stages: "Start with concrete experiences, reflect upon the experiences, form generalizations and conceptual models, and test the implications of conceptualization through new experiences. (Kolb, Sugarman, P.64) Figure 2 diagrams Kolb's cyclical process.

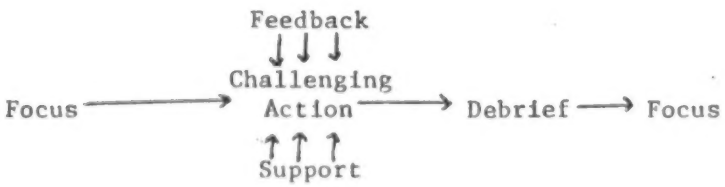
Figure 2. Kolb's Cyclical Learning Process



Joplin, presents a five-stage model of experiential learning and, as in Kolb's model, is "complete learning" in that both models integrate the cognitive and affective dimensions of growth and learning.

1. Focus: presenting the task and isolating attention of the learner for concentration;
2. Action: places learner in stressful situation to confront problem; an unfamiliar environment, learner uses new knolwedge; problem may be physical, intellectual, emotional, or spiritual; involves student with subject; student accepts responsibility;
3. Support: enables student to continue to try;
4. Feedback: ensures student has necessary information to progress;
5. Debrief: learning is recognized, articulated, and evaluated. (Joplin, p.7)

Figure 3. Joplin's Action-Reflection Cycle



Haney and Mumford view learning from experience as a four-stage process:

1. having an experience;
2. reviewing the experience;
3. concluding from the experience;
4. planning the next steps.

The last three models presented in this section have their roots from individuals involved in outdoor experiential education. While these models were designed for wilderness-type experiences, they are equally appicable to all learning situations.

The model designed by Walsh and Golins was originally intended to depict the process of learning experienced on Outward Bound courses.

First, the learner is placed into a

unique physical environment and a

unique social environment

then, given problem-solving tasks

which, lead to a state of adaptive dissonance

to which, the learner adapts by mastery

which, reorganizes the meaning and direction of the learner's experience.

(Walsh and Golins, p.16) (See Figure 4.)

A less complex model was developed by Williamson as a format for designing experiential curriculum in shcool settings.

1. The learner is placed in a problem situation, calling for individual or cooperative action;
2. the actions are observed and reflected upon;
3. the learner reviews the appropriateness of the actions and makes changes;
4. the learner is placed in the problem situation to test desirable changes. (Williamson, p.15)

Figure 5. Williamson's Model of Learning Experientially

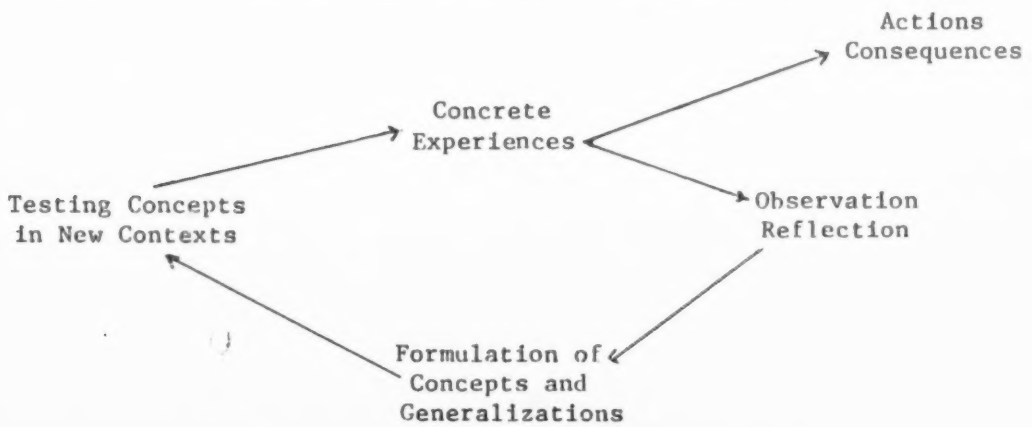
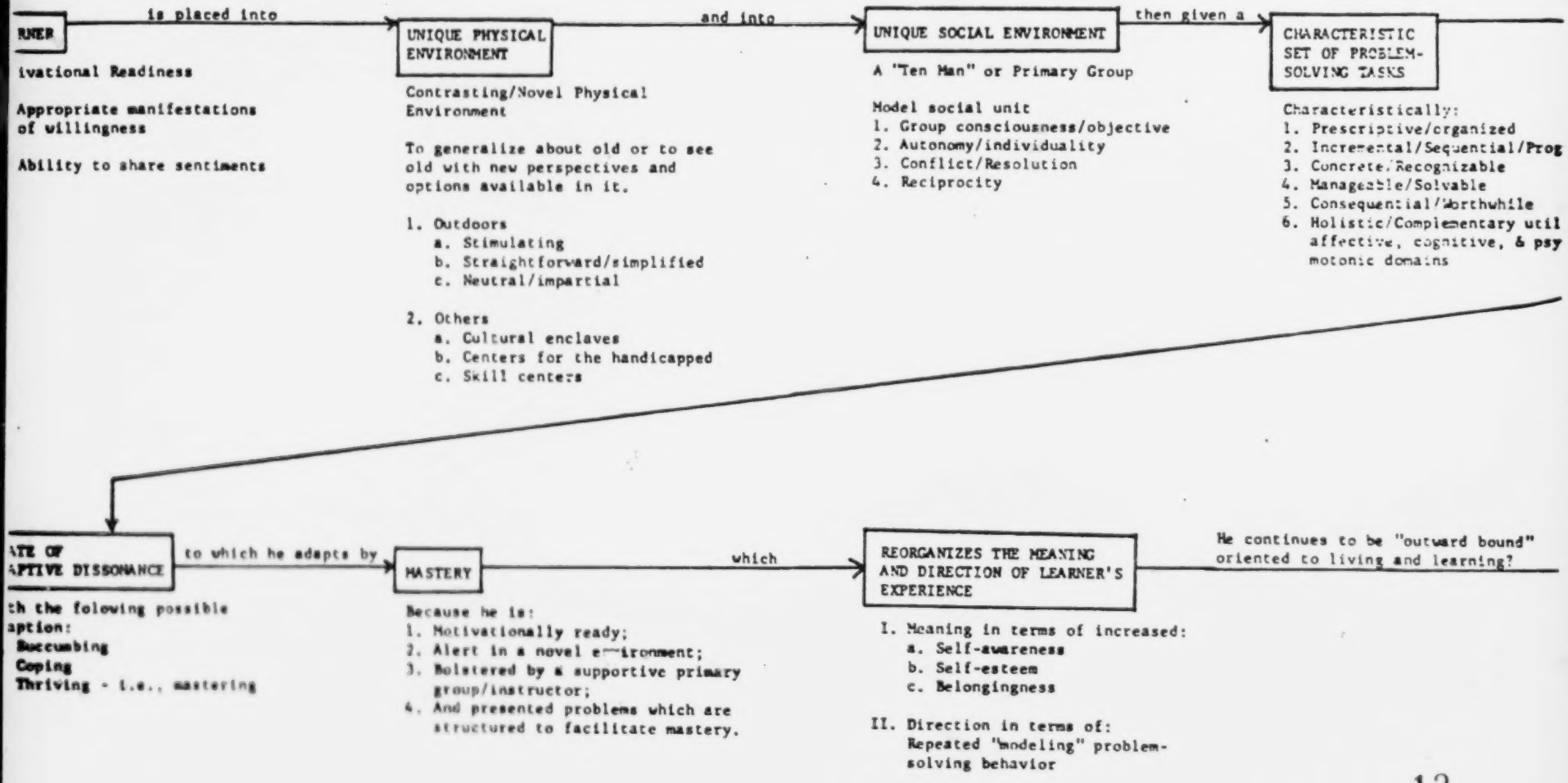


Figure 4

THE OUTWARD BOUND PROCESS

INSTRUCTOR INTERVENES THROUGHOUT PROCESS AS A TRANSLATOR; INITIATOR; TRAINOR; MAINTAINOR; AUTHORITY FIGURE; EXEMPLAR; . . . . . .



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Kesselheim's model, like the others, stresses the importance of reflection on experience as a key element in the learning process and is based on Dewey's dictum that "learning is thinking about experience." His model includes three stages:

1. "Thaw"--some "conventional wisdom or behavior" which is "called into question by being disconfirmed;"
2. "Shift"--"a transition phase offering insight into alternative behavior, or attitudes, or skill;"
3. "Freeze"--the stabilization of behavior "so that it may be retained over time." (Kesselheim, pp.11-12)

Figure 6. Kesselheim's Learning Process

Thaw----------→ Shift----------→ Freeze

All of these models, directly or indirectly, include the elements of learning presented by John Dewey. With an initial impulse, question, or problem, the learner proceeds to make observations and to reflect upon the experience. This leads to some new way of thinking or behaving, in the abstract, which when put into action, or tested, produces new consequences from which the learner can reflect and form addative coneptualizations. Additionally, these models are not static or stagnant; rather, each assumes that learning will be ongoing and continuous, or cyclical, with experiences, processing and buidling upon an ever-evolving foundation of direct experience and involvement.

4. The Purposes of Experiential Education in Higher Education

As a transition between the concepts already presented and the specific experiential programs and activities presented in Part II, a brief review of the purposes of experiential education in higher education will be presented.

Kendall and Duley view experiential education as an essential ingredient for institutions of higher education to fulfill their missions of teaching, research, and services. Concerning the teaching mission, experiential learning is viewed as "Complete learning . . . is student-centered . . . and helps students develop multiple competencies." Regarding research, Kendall and Duley suggest that "students' learning activities present faculty with a steady stream of relevant research problems." Lastly, for service, experiential education provides " . . . a crucial link in serving the needs of industry and in (industry) making thier needs known to the university" and as " . . . the ethical component . . . service to society." (Kendall, Duley, et al., pp.9-13)

The benefits to students are summed up by Duley: students . . .

1. "gain confidence in the upper levels of the cognitive domain;
2. "acquire specific skills that are more easily acquired in the field than in the classroom;
3. "acquire specific knowledge about an institution or an agency;
4. "learn how to learn on their own;
5. "enhance their personal growth and development." (Duley, 1986,p.21)

Sexton and Ungerer present ten purposes for experiential education in higher education:

1. Strengthening student motivation;
2. revitalizing the importance of education in the liberal arts;
3. provding direct experience and professional training;

4. providing students with a sensitivity and understanding of the human condition;
5. as a vehicle for institutional reform;
6. providing interaction with the community;
7. as an effective way of developing interpersonal skills;
8. providing students with opportunitites to solve real problems;
9. providing exposure to careers and data for career decisions;
10. providing a manageable and realistic transition from school to work. (Sexton and Ungerer, pp.7-24)

5. Conclusion--Part I

Experiential education has deep and well-founded roots in the history and practice of education. With an emphasis on active involvement, problem solving, interaction, reflection, and holistic learning, experiential education places the responsibility for learning on the learner, with real and meaningful consequences and with the active development of skills, attitudes, and behaviors relevant to the learner's purposes.

The principles, characteristics, and purposes reviewed in this paper are well in-line with the recommendations made by the Study Group on The conditions of Excellence in America in their report Involvement in Learning: Realizing the Potential of American Higher Education. Part II of this paper will focus on specific experiential programs and activities that develop involvement, student initiative, and direct experience learning.

PART II--EXPERIENTIAL EDUCATION: THEORY INTO PRACTICE

Introduction

While a number of "experiential" learning activities, techniques, methods, and programs will be examined in this section, any attempt to isolate these "items" into categories faces several problems. First, there is the problem of clarity. In many cases, it is difficult to "draw the line" between traditional and experiential education. Following from this is the problem of of integration--many methods and techniques originally identified as "experiential" are now fairly standard and common in educational practice. Third, there is considerable overlap of traditional and experiential education--a blending of methodology that makes distinguishing difficulty.

For the purpose of this review, the three major "Types and Forms of Experiential Education," as identified by Kendall, Duley, et al., will serve as the structural format. The first Type and Form is "Discrete Experiential Education Courses or Programs." Included in this category are internships, cooperative education, field study, field work, independent study, practica, service-learning, and work-learn programs. The second category, "Experiential Education as One or More Components of a Course or Program," includes field projects, field trips, participatory observations, oral interviews, site visits, and field observations. The last major category, "Other Experiential Techniques Incorporated into a Course or Program," includes role playing, laboratory work, simulation games and exercises, student-led class sessions, group learning activities, and learning contracts. (Kendall, Duley, et al., p.31).

A fourth type and form, not addressed in Kendall and Duley's categorization, will be "Wilderness/Outdoor Experiential Programming." This area will include

a review of the ways outdoor experiential education can be integrated and used in higher education.

1. Discrete Experiential Education Courses or Programs.

Cooperative Education

The National Commission for Cooperative Education (1971) defines cooperative education as . . .

> . . . that education plan which integrates classroom experience and practical work experience in industrial, business, government, or service-type work situations in the community. The work experience constitutes a regular and essential element in the educative process and some minimum amount of work experience and minimum of standards of successful performance on the job are included in the requirements of the institution for a degree . . . The institution takes the responsibility of finding educationally related jobs for students. (National Commission for Cooperative Education, n.p.)

K. Patricia Cross, a leading proponent of non-traditional education, posits a number of advantages for students, colleges, and employers involved in cooperative education. For students, the advantages include " . . . increased meaning that the work experience brings to academic study . . . opportunity for career exploration . . . personal growth and maturity . . .financial aid . . . (and) a head start on a career." The advantages for colleges include " . . . enriched programs of education . . . faculty awareness of new developments in their field . . . improved community relations . . . efficient use of college facilities . . . (and) recruitment and retention of students. For employers, Cross sees " . . . the recruitment of future workers . . . college-community relations . . . (and) a desirable impact on other employees." (Cross, pp.17-30)

With over 900 colleges and universities offering cooperative education (Kendall, Duley, et al., P.29), it will be difficult to review all of the possible programs. However, a few, which feature student management, can be highlighted.

Cornell University: involves students in the active management of off-campus learning programs.

University of Maryland: Student workers are trained to serve as peer advisers for other students seeking internships.

University of Michigan: Experienced (graduate and undergraduate) students provide peer-counseling and field supervision for students involved in cooperative education activities.

Hartwick College: Parents of students identify work sites for students.

University of Missouri: Former interns and cooperative education students provide peer counseling and training for other students seeking placement.

University of California (Los Angeles): Graduate students serve as field coordinators, supervising undergraduates involved in internships and cooperative education placements.

Skidmore College: Alumni identify work sites for students. (Kendall, Duley, et al., p.113)

Internships

Similar to cooperative education in many ways, internships are:

> . . . a temporary period of supervised work that provides opportunities to develop skills, to test abilities and career interests, and to systematically examine institutional cultures in light of the central theoretical notions in a chosen academic field of study. (Zauderer, pp.1-2)

While the advantages of internships are similar to the advantages received in cooperative education programs, students can also gain a capacity for learning on their own, while applying theoretical knowledge; problem-solving and decision-making skills; bureaucratic and organizational skills; and mechanical, verbal, and written skills. (Zauderer, pp.5-7) In many cases, internships afford students the opportunity " . . . to develop the skills, knowledge, and abilities

that employers are seeking and that can lead to permanent employment." (Macala, p.57)

Service-Learning

Along with Cooperative Education and Internshps, Service-Learning programs provide the " . . . integration of the accomplishment of a public task with conscious, educational growth." (North Carolina Internship Office, n.p.) Greenburg sees service-learning programs involving students in significant community-based issues while providing students with numerous opportunities to analyze social problems and social systems, and indentifying community resources. (Greenburg, p.16)

The advantages of service-learning programs (again) are similar to those provided by cooperative education and internship programs. (Sexton and Ungerer, p.34) In addition to providing students with marketable job skills, service-learning also presents opportunities for attention to special social needs. At Humboldt State University, students, through Project L.E.A.P., have worekd with physically handicapped youths on river rafting and backpacking trips and organized and conducted a summer camp for hearing-impaired youths. (Bach, Ritter, and Hardin, pp.13-17)

Cross-Cultural Field Study

As a means of developing civic consciousness among students, cross-cultural experiences "provide direct involvement in the basic institutions of society through internships and interaction with diverse people through service." (MacArthur, p.10) This aim, supported by the Carnegie Foundation's report "Higher Learning in the Nation's Service" seeks ". . .the advancement of civic learning as one of higher education's most essential goals." (Boyer and

Hechinger, p.43) At Justin Morrill College (Michigan State University), students design their own educational programs and are involved in college governance and peer advising. In addition, students are heavily involved in social action programs and cross-cultural experiences. The objectives of these experiential programs include:

1. the development of information sources;
2. cultural understanding;
3. interpersonal communications;
4. commitment to persons and relationships;
5. decision-making skills;
6. self-understanding;
7. self-reliance;
8. written communications. (Duley, 1974, pp.13-21)

An example of international, cross-cultural experiential education can be found at the United World Colleges. Primarily founded for 17-19 year old youths, United World Colleges seek student involvement that leads to an understanding of cultural commonalities, while making a statement for world peace and cooperation. With students from over 100 countries attending United World Colleges, students receive training in search and rescue, work with poor and handicapped individuals and groups, are involved in environmental work, and are active in extensive recycling projects. (Sutcliffe, pp.8-15)

Work-Learn

An excellent example of this model and possibly the first college to implement this mode of experiential learning is Antioch College. Founded in 1853 by Horace Mann, Antioch seeks to develop democratic leaders by combining elements of liberal education, work experience, and a sense of group responsibility. Students at Antioch spend over half their time on campus in traditional studies, with

alternating periods off campus on various jobs. Upon returning, students have a wealth of work experience to integrate back into their curriculum studies. Students are expected to participate in the organization and governance of the college and are encouraged to pursue individual research, study, and practical experiences. (Henderson, p.viii)

2. Experiential Education as One or More Components of a Course or Program

As noted in the introduction to this part, it is often difficult to "draw the line" between experiential and traditional methodologies. This problem is certainly evident when the use of field projects, field trips, participatory and field observations, and oral interviews are discussed. Most adults, with at least twelve years of schooling, have participated in many, if not all, of these methods. In this case, however, a "line can be drawn" between traditional and experiential by considering the primary purposes of the learning. Experiential education, as described in Part I, is learner-centered, stresses active learner involvement, emphasizes the pursuit of meaning and relevance, is based on direct experience, and focuses on process as much as product.

The "University Without Walls" (UWW) concept, introduced in 1971 by the Union of Experimenting Colleges and Universities (UECU), is a "nationwide network of baccalaureate degree programs housed in fourteen specific campuses of the Union." (Korey and Bogorya, p.19)

UWW programs, besides incorporating individual and small group learning projects, internships, credit for prior experience, and other learning/assessment practices, strongly encourage active, experiential learning through field projects, observations, interview, and field trips. (Korey and Bogorya, p.19)

Empire State College in Saratoga Springs, NY, offers no formal course work,

yet engages students in numerous active and external/field learning situations. (Hovle, pp.97-100). Metropolitan State University, in Minneapolis, provides "alternative ways for adults to participate in higher education" by developing "a highly individualized, community-based, student-centered educational process that gives adult students the authority and responsibility for determining the content and criteria for quality higher education." (CAEL, p.3) Metropolitan State University encourages students to "find many of their teachers in the community" and to directly apply theoretical concepts to specific, real-life situations. (CAEL, p.4)

A number of programs in health services administration incorporate field experiences, along with traditional curriculum studies. At Governor's State University in Park Forest, Illinois, students receive approximately thirty percent of their curriculum in practical field settings. The Health Administration and Planning Program at the University of New Hampshire is interdisciplinary in nature and strongly encourages observation, field projects, and practicum experiences. (Korey and Bogorya, p.31) A similar program at Concordia College in Minnesota likewise stresses active field-based observations, projects, and interviews. (Quatrano, p.24)

An innovate approach to teaching history was offered cooperatively by the University of Alabama and Samford University during a six-semester hour course titled "A Workshop in Experiential Education." Students spent six weekends "in the field" at various historical sites in Alabama. Students not only learned local cultural history and became aware of environmental issues, but also were involved in the process of learning and applying experiential education methods. (Crew, pp.29-27)

As a way of making the transition from adolescence to adulthood, several

schools (including secondary and collegiate) have adapted the Australian Aborigine ritual of "walkabout." A "walkabout" is designed to include adventure, creativity, service, practical skill, and logical inquiry into a self-chosen, challenging, and experiential journey of self and social discovery. Students select and design a "walkabout" experience/journey, implement the plan, and evaluate and apply their learning to their future plans. (Gibbons, pp.596-602) This process is, in many ways, similar to the American Indian ritual of "vison-quest."

This brief section was intended to provide an overview of some possible externally-oriented and experientially-based practices that involve students in direct learning. The next section will review ways in which experiential education can be incorporated into classroom settings.

3. Other Experiential Techniques Incorporated into a Course or Program

There is a vast array of possible techniques which could be used experientially in classroom settings. This section will first review sampling of such techniques and methods and will conclude with a review of ways in which these methods are applied in three collegiate courses--English, Political Science, and Psychology.

Jernstedt notes a number of traditional methods, frequently used in classrooms, which can be implemented experientially. For instance, printed handouts, when constructed and designed properly, can actively engage learners in a discovery or problem-solving process based on direct experience. Recalled personal experiences, through mental imagery or examples, can be useful when the goal is to understand some complex concept. Novels provide vicarious experiences which can involve intellectual, as well as emotional, responses. Instructor modeling provides students the opportunity to observe the teacher actively engaged in a

behavior the students are trying to learn. Demonstration, where students are actively involved, is a way of illustrating a concept. (Jernstedt, pp.13-15)

Carl Rogers describes a number of methods experientially-based, that promote and build freedom and responsibility:

1. building upon real problems;
2. provding resources;
3. using (learning) contracts;
4. division of the group;
5. simulation;
6. programmed instruction;
7. encounter groups;
8. self-evaluation. (Rogers, pp.130-143)

Simulations

For a number of years, simulations and simulation games have been used in classroom settings when direct real-life involvement in a problem has been impossible to implement. "Games and simulations provide learning experiences that include students in a replication of some aspect of the real-world. . . . role playing, computer-based simulation . . . providing active, relevant, and motivating learning experiences." (Mitchell, pp.57-67) Simulations, by their nature and design, offer the benefit of practice without perfection. " . . . simulations provide participants with practice in managing complex work-related situations in a low-risk setting." (Morano and Di Fabio, pp.37-45).

Case Study

A popular method of providing students with an in-depth view and holistic picture of a practical situation, case studies can foster inductive thinking,

questioning skills, and group discussion. (Lovelock, p.26) Case studies provide in-depth data on a specific incident, promote comprehensive understanding, and naturally encourage students to brainstorm and problem-solve. Case studies can also be used for evaluation purposes by employing observation, interviews, content analysis of docuements, and group discussions. (Stevenson, p.43)

Theatre and Role-Playing

Similar, in some ways, to simulation, theatrical methods and role-playing offer the advantages of actively involving students in roles and in the process of demonstrating practical problems and situations. "Theatrical techniques that stimulate emotional response and enhance the development of knowledge bring individauls in contact with a different dimension of knowing." (Lewis, p.92) Theatrical techniques can include the use of puppets, mime, improvisation, and exploratory theatre, which serve as a vehicle for collaborative problem-solving. (Lewis, pp.91-98)

Learning Contracts

As a means of developing commitment, encouraging students to decide on goals and accept responsibility for learning, "contracts are written agreements between a student and a faculty member or faculty committee regarding a particular amount of student work and the institutional reward or credit for this work." (Berte, p.vii) Rogers views contracts as an "open-ended device which helps to give both security and responsibility within an atmosphere of freedom . . . that enables the pupil to set a goal for himself and to plan what he wishes to do." (Rogers, p.133)

Learning in Groups

An option, with experiential applications, involves the design of educational

processes which promote interpersonal interactions towards curriculum objectives. In some academic stituations, encounter groups may result in improved communications, increased self-understanding, and acceptance of others. (Rogers, pp.141-2) In other situations, learning groups can "involve students in complex interactions which develop cognitive skills." (Bouton and Rice, pp.31-2) At the University of the District of Columbia, forty faculty are invovled in the Cooperative Learning Project. Faculty receive in-service training and conduct their classes with group-centered methods. (Bouton and Rice, pp.31-40)

Concerning the practical application of these methods to acadmeic course work, Beidler teaches a writing course at Lehigh University by involving his classes in 3-day wilderness experiences with Bloomsburg University's Quest Program. Students keep journals of their experiences of climbing, rappelling, initiative courses, backpacking, and camping and return to campus with increased motivation and desire to countinue writing. Beidler credits this change to the direct involvement and the personal significance students experienced on the wilderness program. (Beidler, pp.34-41)

At Unity College in Maine, Purdy instructs a Political Science course titled "State and Local Government" using a text, written assignments, and outside readings. However, he complements these learning activities with field trips, interviews with government officials, small group projects, and individual and group discussions. Results of this method indicate that students develop skills in relating to people, research, planning, and problem-solving. (Purdy, pp.37-39)

For an introductory Psychology course, Carl Rogers describes a teacher who allows students to choose from a number of learning alternatives including interviews with the instructor, goal statements, experiments, research proposals

group projects, demonstrations, field trips, personal counseling, encounter group participation, and self-evaluation. In addition, the options also include traditional activities such as attendance, library research, term papers, and course examinations. Students, given freedom to choose and learn about their own interests, produced significantly more projects and reports than those opting for the traditional teacher-directed structure. (Rogers, pp.36-7)

In a Psychology of Personality course, students learned by assembling a personality inventory, constructing an adjective checklist, keeping a journal, designing projective instruments, and practicing group problem-solving and decsion-making, along with frequent observations and recordings of various situations. (Brender, pp.17-22)

This listing of alternative, experiential methods is by no means complete. It is important to note, at this point, that there is a growing body of knowledge that is indicating that students are learning more and retaining it longer when the methodology involves direct and active learner participation, with freedom to choose and take responsibility for the process and outcomes of learning. The final section of Part III will explore the integration of wilderness adventure in collegiate curriculums.

4. Wilderness/Outdoor Experiential Programming

Modern outdoor experiential education programming can be traced to Kurt Hahn, who, following World War II, applied the principles of self-reliance, physical fitness, craftsmanship, and compassion to a program later to be called Outward Bound. Hahn, having founded and directed schools in Germany and Scotland prior to the War, was convinced of the necessity for strong academic preparation along with the development of the powers of judgment, which he viewed as more

important than the accumulation of knowledge. "I am by no means advocating a lowering of intellectual requirements--on the contrary, less would achieve more, while demanding more training of thought, less factual knowledge. Depth is what matters. Curricula overload with subject-matter were the source of intellectual shallowness." (Rohrs and Tunstall-Behrens, p.133)

With Outward Bound schools established in the United States as early as 1962, a slow but steady interest developed in using the outdoors as an educational medium. Today, there are numerous outdoor programs, many affiliated with colleges and universities, which serve as adjunct or foundational components of collegiate programming and academic studies.

The goals, purposes, and objectives of experiential outdoor education are generally the same as those of all experiential-learning programs. Medrick cites four specific reasons for implementing outdoor programming in higher education.

1. Individual Student Growth. Providing the opportunity for individual students to undergo the experience of OUTWARD BOUND courses as a valuable learning opportunity with primary emphasis on personal growth and further possibilities for individual, independent study in areas involving the environment, sociology, psychology, and education.
2. Curriculum Integration. Seeking means through which the methodology, the experiential learning opportunities, and open dialogue environment of the OUTWARD BOUND experience can be used, modified or incorporated to fit the particular academic needs or designs of subject areas such as the biological sciences, social sciences, urban studies, education, current affairs, literature, and philosophy.
3. Faculty-Student Relations. Providing opportunities for comfortable yet intensive interaction between faculty and students through

freshman orientations, special projects based on a learning or service concept, field trips with opportunities for cross-fertilization of ideas, and mixing of disciplines.

4. Leadership Teambuilding. Working with specific student or faculty groups on ways to make them more effective in their particular leadership roles either through teambuidling and conflict resolving activites or through specific planning or group effectiveness training in an OUTWARD BOUND setting. OUTWARD BOUND can provide a context which promotes and supports specific agendas or problem solving.

Practically, a number of colleges and universities have implemented outdoor experiential learning into their programs.

Freshmen Orientation: Wheaton College and William Penn College (among others) have successfully conducted numerous pre-college wilderness courses to prepare their students for the social and academic demands of campus life. (Medrick, p.9) Results of William Penn's program indicate that students gained in maturity, ability to relate to others, and self-confidence. (Mothershead, n.p.) At Wheaton College, students perforemd significantly better in academics than matched group particpating in other orientation activities. (Sullivan, Sprunger and Williams, n.p.)

Living-Learning Semester: At Dartmouth College, a volunteer group of students each semester participate in a total living and learning experience. Their self-designed program includes wilderness trips, cooperative living on campus, common academic work, service projects, emergency skills training, common adventures, and rescue work. (MacArthur and Bergman; Medrick, p.8) A similar program is conducted at Duke University in North Carolina.

Residence Hall Staff Training: Colorado College prepares their residence hall staff by involving them in a one week outdoor adventure program designed to build teamwork and promote communications and problem-solving. Students at Colorado College are encouraged to take an Outward Bound course at least once during their stay at the college. (Medrick, p.7) Similar, though shorter, programs are conducted by Touch of Nature Environmental Center for Southern Illinois University, St. Louis University, and Southeast Missouri State University residence hall staffs.

Experiential Colleges: Prescott College (Arizona), Evergreen State College (Washington), and Unity College (Maine) have evolved from traditional liberal arts colleges to institutions that have integrated experiential educational philosophy and methodologies into most components of their curriculum. Faculty are selected based on their knowledge and experience with experiential learning and receive frequent in-service training on new developments in experiential education. (Medrick pp.7-10)

PART III--ON ESTABLISHING EXPERIENTIAL PROGRAMS IN HIGHER EDUCATION

The establishment of an experiential education program and the integration of experiential practices into classroom settings generally follow the same planning and implementation processes as the establishment or integration of any new program. Kendall, Duley, et al. present eight basic tasks to consider when establishing an experiential program (internships, cooperative education, service-learning):

1. establishing goals for the program or course;
2. identifying work or service sites;
3. helping students establish appropriate educational objectives;
4. recruiting, selecting, and establishing students in field sites;
5. preparing students for learning and working;
6. monitoring and supporting the learning;
7. evaluation and assessment;
8. reporting the learning (transcripts). (Kendall, Duley, et al., pp.71-3)

They also see four critical issues to consider prior to establishing or integrating experiential education:

1. The objectives of experiential education programs must contribute to and be compatible with those of the academic curriculum;
2. For faculty to adapt the use of experiential education, such programs must provide faculty with incentives and rewards which are at least compatible to those gained from teaching through lectures, seminars, and laboratories.
3. Experiential education must be recognized through credits that count towards the major and degree requirements if it is going to be a legitimate, supported partner to classroom learning;

4. If experiential education is to be integrated into the curriculum, faculty involved in that curriculum must be fully consulted and involved in the integration process. (Kendall, Duley, et al., pp.29-30)

Thus, the polictical implications and resistance are potentially hazardous if faculty are not involved in the integration process. Kendall, Duley, et al, present 21 tasks to increase faculty involvement:

1. Feed information about experiential learning to faculty continuously.
2. Act as a catalyst to link faculty from different departments.
3. Organize informal discussions.
4. Find out what people's concerns are.
5. Work through supportive opinion leaders on campus.
6. Establish a faculty committee on experiential education.
7. Let students speak for the value of experiential learning.
8. Conduct workshops or sponsor speakers on campus.
9. Give away money and authority.
10. Reinforce excellence in faculty support of experiential education.
11. Help academic advisors to understand and promote experiential learning as an integral part of the curriculum.
12. Arrange faculty internships.
13. Have a summer study group of faculty focusing on experiential learning.
14. Create a rotating faculty position in the central office for experiential education.
15. Take faculty on site visits.
16. Ask faculty to design and implement reserach projects related to experiential learning.

17. Help key faculty members arrange sabbaticals that involve experiential learning.
18. Establish "Field Study Coordinatorships" like Teaching Assistantships for graduate students or advanced undergraduates.
19. Offer senior faculty opportunities to take on leadership roles in experiential education as a renewal experience.
20. Establish a library of resources for faculty about using experiential learning in courses.
21. Take faculty to professional meetings for experiential educators.

(Kendall, Duley, et al., p.57)

CONCLUSION

"Learning by doing," the simplest definition of experiential education, is probably the most basic way of learning. In primitive times, as well as today, one does not always possess the knowledge, skill, or resources to solve problems, investigate a question, or fix a leaky faucet and, thus, relies on "trial and error" methods.

Experiential education is more than this simplistic approach. Experiential education involves a guided process of questioning, investigating, reflecting, and conceptualizing based on direct experience. The learner is actively engaged in the process of learning, has freedom to choose, and experiences directly the consequences.

This paper has attempted to present a brief, yet comprehensive, overview of the philosophy and methodology of experiential education. It is by no means a complete and thorough survey of the literature and applications. It was intended to present a picture of the vitality that this way of learning has and can continue to contribute to higher education.

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